Appl. No.: 10/624,735 Patent 53977-00001

Art Unit: 3733

Reply to Office Action of January 10, 2006

## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

## Listing of Claims:

1. (Previously Presented) A self-drilling bone screw, comprising: a body having a head at one end and a tip defining a single generally flat cutting edge at an opposite end thereof disposed generally perpendicular to a central longitudinal axis of the body; and

a dual lead thread extending radially outwardly from the body in a spiral path from the cutting tip towards the head.

- 2. (Previously Presented) The bone screw of claim 1, wherein the dual lead thread is variable pitched.
- 3. (Original) The bone screw of claim 2, wherein the dual lead thread pitch is tapered towards the cutting tip and transitions to a straight thread towards the head.
- (Original) The bone screw of claim 1, including a recess formed in the 4. head configured to receive an end of an insertion tool.
- (Original) The bone screw of claim 1, wherein the bone screw is 5. comprised of a medical grade titanium alloy.
- 6. (Original) The bone screw of claim 1, wherein the bone screw is approximately 1.0 to 2.0 mm in diameter and approximately 3.0 to 6.0 mm in length.
- 7. (Previously Presented) A self-drilling bone screw, comprising: a body having a head at one end and a tip defining a single generally flat cutting edge at an opposite end thereof disposed generally perpendicular to a central longitudinal axis of the body; and

a dual lead thread extending radially outwardly from the body in a spiral path from the cutting tip to the head, the dual lead thread being variable pitched.

(Original) The bone screw of claim 7, including a recess formed in the 8. head configured to receive an end of an insertion tool.

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9. (Original) The bone screw of claim 7, wherein the bone screw is comprised of a medical grade titanium alloy.

- 10. (Original) The bone screw of claim 7, wherein the bone screw is approximately 1.0 to 2.0 mm in diameter and approximately 3.0 to 6.0 mm in length.
- 11. (Previously Presented) A self-drilling, self-tapping bone screw, comprising:

a body comprised of medical grade titanium alloy of approximately 1.0 to 2.0 mm in diameter and approximately 3.0 to 6.0 mm in length, the body having a head at one end and a tip defining a single generally flat cutting edge at an opposite end thereof disposed generally perpendicular to a central longitudinal axis of the body, the body having a generally constant root diameter;

a dual lead thread extending radially outwardly from the body in a spiral path from the cutting tip towards the head, the dual lead thread having a normal rake angle and being variable pitched such that the pitch of the thread is tapered towards the cutting tip and transitions to a straight thread towards the head; and

a recess formed in the head configured to receive an end of an insertion tool.

- 12. (Previously Presented) The bone screw of claim 1, wherein the dual lead thread extends from the tip continuously to the head.
- 13. (Previously Presented) The bone screw of claim 1, wherein the body has a constant root diameter.
- 14. (Previously Presented) The bone screw of claim 1, wherein the dual lead thread has a normal rake angle.
- 15. (Previously Presented) The bone screw of claim 7, wherein the body has a constant root diameter.
- 16. (Previously Presented) The bone screw of claim 7, wherein the dual lead thread has a normal rake angle.